

*Amended*  
1. (Once Amended) In the design of integrated circuits, a computer controlled method for placing cells, comprised of the computer implemented steps of:

- a) generating a netlist through a synthesis process;
- b) executing a cell separation process according to the netlist, wherein cells are placed at locations;
- c) changing the netlist;
- d) modifying spacings of the cells responsive to changes made to the netlist, wherein the placements of the cells are changed according to the changes made to the netlist;
- e) partitioning the cells into a plurality of partitions;
- f) changing the placements of the cells when a new partition is created;
- [f] g) determining whether the partitions have converged, wherein steps [b-e] c-f are repeated if convergence is not yet achieved.

*a*  
2. (Once Amended) The method of Claim 1 further comprising the step of changing a size of a [placement] total area in which cells may reside in response to changes made to the netlist.

3. (Once Amended) The method of Claim 1, further comprising the step of inputting HDL, user constraints, and technology data into the synthesis process for generating the [mapped] netlist.

4. The method of Claim 1, wherein the netlist is comprised of a mapped netlist.

10. (Once Amended) A computer system including a processor coupled to a bus and a memory coupled to the bus, the system programmed to include a rough placement logic for placing cells of an integrated circuit design represented as a netlist having cells and connections between the cells, the rough placement logic comprising:

- a cell separator for assigning initial locations to each of the cells of the netlist;
- a synthesis tool for changing the netlist in response to cell location information, wherein an [placement] area in which cells are [is] allowed to be placed within is scaled in response to changes made to the netlist;
- a spacer for changing partitions [sizes], wherein [the] changes to the partitions result in corresponding changes to locations of where the cells are placed;
- a partitioner for partitioning the cells into a plurality of separate partitions, wherein cells are placed at different locations when a new partition is created;
- a comparator for determining whether the partitions have converged.

15. (Once Amended) A computer-readable medium having stored thereon instructions for causing a computer to implement a placement process comprising the steps of:

- a) generating a netlist through a synthesis process;
- b) executing a cell separation process according to the netlist, wherein cells are placed at particular locations;
- c) changing the netlist;
- d) modifying spacings of the cells responsive to changes made to the netlist, wherein the placements of the cells are changed according to the changes made to the netlist;
- e) partitioning the cells into a plurality of partitions;
- f) changing the placements of the cells when a new partition is created;

~~[f)] g) determining whether the partitions have converged, wherein steps b-[e]  
f are repeated if convergence is not yet achieved.~~

16. (Once Amended) The computer-readable medium of Claim 15, further comprising the step of inputting HDL, user constraints, and technology data into the synthesis process for generating the [mapped] netlist.